

7. What are the x - and y -intercepts for the graph of $-3x + 5y = -15$?

x -int. $x=5$

$$y=0$$
$$-3x + 5(0) = -15$$
$$-3x = -15$$

y -int. $y=-3$

$$x=0$$
$$-3(0) + 5y = -15$$
$$5y = -15$$

$(5, 0)$
 $(0, -3)$

10. What is the solution of the system of equations?

$$y - 2x = -6$$

* $y - 4x = 0$

$$\begin{array}{r} y - 4x = 0 \\ +4x \quad +4x \\ \hline \end{array}$$

$$y = 4x$$

$$y = 4(-3)$$

$$y = -12$$

$$4x - 2x$$

$$y - 2x = -6$$

$$4x - 2x = -6$$

$$\begin{array}{r} 2x = -6 \\ \hline 2 \quad 2 \end{array}$$

$$x = -3$$



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$y = -12$

y x

$$4x - 2x = 2x$$

10. _____

$$\begin{array}{r} y - 2x = -6 \\ 4x - 2x = -6 \\ \hline 2x = -6 \\ \hline 2 \quad 2 \\ \hline \end{array}$$

$x = -3$

$(-3, -12)$

15. _____



9. What is the equation in slope-intercept form for the line that passes through the points $(-2, -1)$ and $(1, 5)$?

$$\begin{array}{cc} x_1 & y_1 \\ \hline x_2 & y_2 \end{array} \quad y = mx + b$$

9. _____

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{5 - (-1)}{1 - (-2)} = \frac{6}{3} = 2$$
$$y = 2x + 3$$

$$y = mx + b$$
$$(-1) = (2)(-2) + b$$
$$\rightarrow -1 = -4 + b$$
$$b = 3$$

2. _____

3. What is the slope of the line that passes through the points $E(-1, 4)$ and $F(2, 6)$?

$$m = \frac{6-4}{2-(-1)} = \frac{2}{3}$$

3. _____

4. The cost of nails varies directly with the number of pounds bought. If 4 pounds of nails cost \$11.60, what is the cost of 3.5 pounds?

$$y = kx$$
$$\frac{11.60}{4} = \frac{k(4)}{4}$$
$$k = 2.90$$

$$y = kx$$
$$y = (2.9)(3.5)$$
$$y = 10.15$$

4. _____

5. What are the slope and y-intercept for the graph of $y - 4x = -2$?

$$y - 4x = -2$$
$$\begin{array}{r} +4x \quad +4x \\ \hline y = 4x - 2 \end{array}$$

6. What is the equation in slope-intercept form for the graph shown?



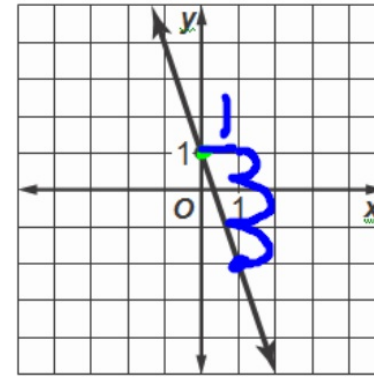
$$y = mx + b$$

5. _

6. What is the equation in slope-intercept form for the graph shown?

$$y = -3x + 1$$

$$\begin{array}{l} \text{y-int} \\ b = 1 \end{array} \quad \begin{array}{l} \text{slope} \\ m = -3 \end{array}$$



-3

6. _